

Table CERAMIC-TOPS

By F. Leland Elam

Color combinations and arrangements of the tile are limited only by individual taste and ability and by the availability of tiles in the desired colors. The $21\frac{1}{4}$ x 30-in. plywood top used for the table illustrated accommodates an even number of glazed tile $4\frac{1}{4}$ in. sq., while the edges are faced evenly with 1-in. wide unglazed tile in 1 and $2\frac{3}{16}$ -in. lengths. Other sizes of tiles can be used for the top and edges simply by cutting the plywood top to the required size. Also, designs as well as figures can be painted on the tiles selected for that purpose, Fig. 1.

Before obtaining the tile, it is a good idea to sketch several layouts, simulating the colors of available tile and drawing figures and designs and locating them for the most pleasing effect. Then, obtain the required tile and place the large ones on the plywood base according to the color plan of the selected layout. Next, remove the tiles that are to be painted. When two or more tiles serve as a background for a single figure, they must be taped together for proper alignment of the segments.

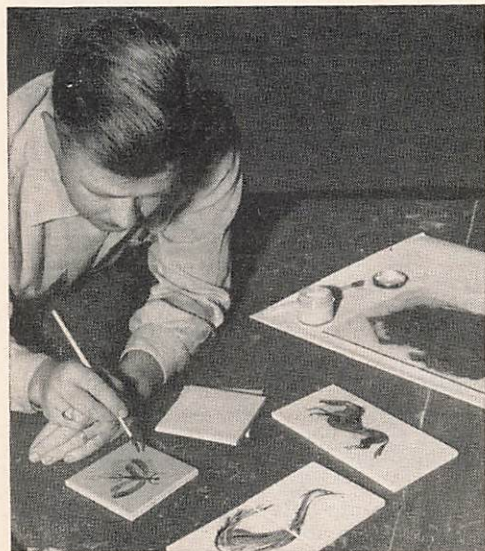
Paints for the illustrations are made up by mixing a small amount of liquid furniture polish (wax base) with a colored oxide that is appropriate for each of the required paint colors. The wax serves as a good vehicle for flowing on the colored oxides

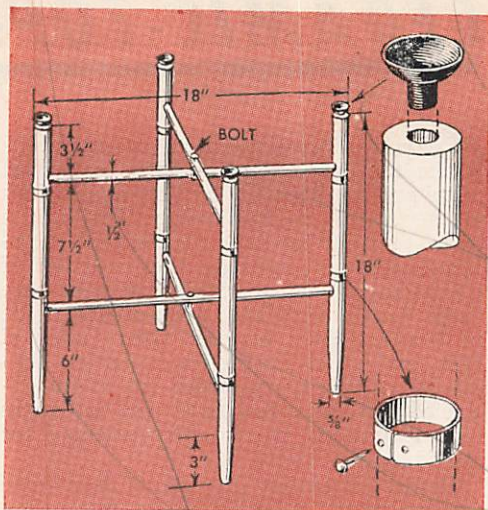
3. Grout is worked into tile joints by moving palm of hand with circular motion over surface of table

1. Figures and designs painted with color-oxide mixtures become part of tile after firing them in kiln

IF YOU HAVE a penchant for household furniture that is a bit unusual, here is a coffee table you will want to make. Ceramic tile, some with colorful figures painted on them, are cemented to a panel of $\frac{3}{4}$ -in. plywood which is mounted on wrought-iron legs to produce a beautiful and serviceable coffee table with a personal touch.

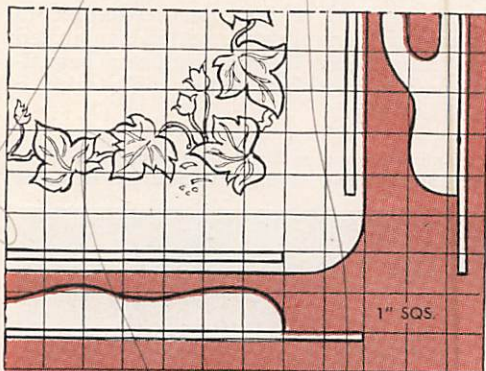
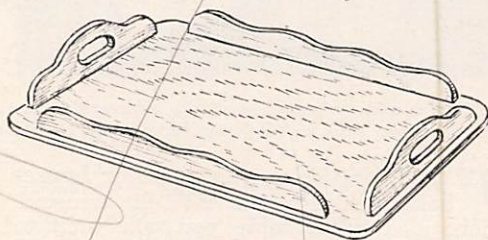
2. Painting figures on tile is easy with paint made from colored oxide mixed with liquid furniture wax





Tray on Folding Stand Ideal for Snacks

Serving snacks to a few guests or the family is much easier for the hostess when the serving tray can be placed on a folding stand such as the one illustrated. The stand will take a tray of any shape with a radius of 9 in. or more and folds flat for compact storage. Rubber suction cups glued in holes drilled in the upper ends of the legs hold the tray securely once it is pressed in position on them, making the unit very adaptable for use as a TV table, tea table, snack table or end table as desired. If no suitable tray is available, the one shown can be made by making a full-size pattern from the squared drawing and cutting the members from 1/4-in. hardwood plywood and assembling them with glue and nails. The legs of the stand are 1-in.-dia. hardwood dowels, cut to length and drilled to accept the crossrails. The latter are cut from 1/2-in.-dia. hardwood dowels. A hole, drilled vertically through the diameter of each crossrail, accommodates a 3/16 x 1 1/4-in. stove bolt as shown in the drawing above. Before gluing the crossrails, 1/4-in.-wide strips of polished sheet brass are wrapped around the legs at two elevations and secured with brass escutcheon pins as indicated in one of the details. The holes for the suction cups, also, are drilled at this time. The legs and crossrails are painted black to contrast with the decorative brass trim on the legs for a smart appearance.



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Bertram Brownold, Cedarhurst, N. Y.

Cooling Photo Developer

When cooling or warming a bottle of photo developer under a faucet, try inverting a drinking glass over the open neck so that the water can flow down all sides of the bottle. This will permit the water to envelop the entire bottle without entering it.—J. Comstock, Wellsboro, Pa.

Repair Tackle With Nail Polish

Clear fingernail polish is ideal for quick repairs to chipped plugs, loose rod windings and damaged windings on flies and other fishing tackle. Also, a drop of polish on a mosquito bite will stop the itching almost immediately.

Harry J. Miller, Sarasota, Fla.

COFFEE TABLE

in that it dries quickly, preventing the colors from intermixing. A small brush is used to apply the paint as in Fig. 2.

After the tiles are painted, they are placed in an electric kiln for firing at a temperature of 1750 deg. F. At the moment the glaze on the tile melts, the heat is turned off and the tile is allowed to cool with the kiln door closed. When cooled, the glaze hardens again and the figure or design fuses with it in permanent colors.

The next step is to return the painted tiles to their respective places on the table and begin cementing the tiles, starting at one corner, and being careful to align the outside tiles with the edges of the table. When all large tiles are set, the small ones are cemented on the edges of the table as shown. Ceramic-tile cement is used for both types of tile.

About 8 hr. after the tiles have been cemented, the tile joints are filled with grout as in Fig. 3. For this, portland cement is dry-mixed with powdered brick-red cement chrome oxide. Then, water is added until it attains a consistency of light cream. After the grout has dried for 15 min., the excess is wiped from the tile with a damp sponge, Fig. 4. About 24 hr. are required for complete hardening of the grout, after which a 10 percent solution of

4. After grout sets, excess is removed with wet sponge, being careful not to dislodge it from joints



muriatic acid is applied to the entire tiled surface, Fig. 5, to dissolve any remaining grout particles. The acid is then removed by rinsing with water. Wear rubber gloves when rinsing off the acid and be careful it does not get on the clothes. ★ ★ ★

5. Muriatic-acid solution brushed on tile, dissolves hardened grout particles for removal with wet sponge





Retaining Groove in Bench Top Keeps Screws From Rolling Off

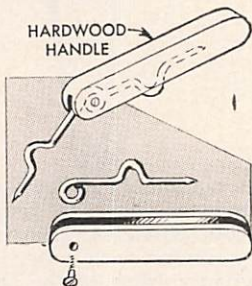
Screws, nuts and other small parts of an assembly that are placed on a workbench can be kept from rolling off the top by cutting a $\frac{3}{8}$ -in. groove in it near the outer edges as shown. A groove is better for this purpose than a raised border of wood or metal because the groove will not interfere with work that must be placed over the edges of the bench and it permits easy cleaning of the bench top.

Wrap Gift With Paper Tablecloth

When you have a large package to wrap as a gift, try using a paper tablecloth of the required size for wrapping material. This makes a neater and more attractively wrapped package than is possible when several sheets of gift-wrapping paper are joined together to cover the package.

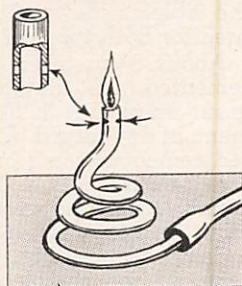
Jackknife-Style Scribing Tool

Here is a handy scribing tool that you can carry in a trouser pocket, since the sharply pointed scriber can be closed safely in the same manner as a jackknife blade. The tool is made by forming a loop at the end of a length of stiff wire and pointing the other end. The wire is then mounted on a hardwood handle with a deep groove cut in it.



Improvised Bunsen Burner

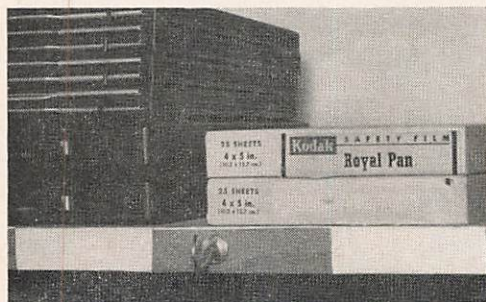
When you need a Bunsen-type gas burner for shopwork or for heating household repairwork, this improvised burner can be made in a few minutes. Simply form a length of soft-copper tubing as shown in the detail and drill several small holes in the upper end of the spiral to admit air. A length of rubber tubing connects the burner to an outlet.



Luminous Tape in Darkroom

Luminous paint or tape applied on the edges of darkroom shelves make film, holders and film hangers easier to locate in the dark. Select spots for the tape carefully to prevent fogging the film when loading or developing it.

Marshall Lincoln, Fort Wayne, Ind.



Notch Ship's Margin Planks

For authentic reproduction of model ships made to scale, the ends of deck planks at the bow should be squared and let into notches in the margin planks, as shown, rather than ending them in sharp points. The squared end of each plank should equal one third of its width.

